

Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) An implant for an osteosynthesis device, in particular for the spine, the implant comprising:

a first assembly [(I)] comprising:

a fixing body [(5)] for a bracing rod [(3)], said body being arranged to present a reception housing [(6)] for receiving an anchor screw head [(7)], thereby defining a ball joint between the anchor screw [(2)] and the fixing body;

a positioning ring [(21)] for interposing between the anchor screw head [(7)] and the bracing rod [(3)];

and a second assembly [(II)] comprising a nut type system [(33)] for fastening the bracing rod (3) to the fixing body [(5)],

the implant being ~~characterized in that~~ further comprising:

the first assembly [(I)] has a positioning ring [(21)] mounted in the fixing body [(5)] with freedom to move in limited linear displacement and allowing the body and the anchor screw to rotate freely relative to each other in the absence of the bracing rod [(3)]; and

the second assembly [(II)] has a nut type system [(33)] adapted on being screwed onto the body to bear against the bracing rod [(3)] and move the positioning ring [(21)] in linear manner so that on being tightened it clamps the bracing rod [(3)] between said system and the positioning ring [(21)], and also clamps the anchor screw [(2)] between the positioning ring [(21)] and the fixing body [(5)].

2. (currently amended) An implant according to claim 1, ~~characterized in that~~ wherein:

the fixing body [(5)] has two side branches [(13)] defining a channel [(14)] between them that opens out on either side of the body in order to receive the bracing rod [(3)], the side branches [(13)] having outside walls [(34)] that are threaded; and

the fastening system [(II)] comprises a nut [(33)] adapted to be screwed onto the outside threaded walls [(34)] of the side branches [(13)], the nut [(33)]

being fitted in its diametral zone with a shoe ~~[[36]]~~ mounted to rotate freely and designed to come to bear against the bracing rod ~~[[3]]~~ so that when tightened it clamps said shoe ~~[[36]]~~ and the positioning ring ~~[[21]]~~.

3. (currently amended) An implant according to claim 1, ~~characterized in that~~ wherein the positioning ring ~~[[21]]~~ presents a concave surface ~~[[28]]~~ complementary to the bracing rod ~~[[3]]~~ and is guided to slide in such a manner that the concave surface defines a portion of the reception channel ~~[[14]]~~ for receiving the bracing rod so as to ensure that the bracing rod ~~[[3]]~~ is positioned automatically between the side branches ~~[[13]]~~ and on the positioning ring ~~[[21]]~~.

4. (currently amended) An implant according to claim 3, ~~characterized in that~~ wherein the positioning ring ~~[[21]]~~ is guided to move with limited linear displacement relative to the fixing body ~~[[5]]~~ by means of a guide peg ~~[[24]]~~ co-operating with a complementary bore.

5. (currently amended) An implant according to claim 2, 3 or 4, ~~characterized in that~~ wherein the positioning ring ~~[[21]]~~ presents a through opening ~~[[27]]~~ opening out between the side walls ~~[[13]]~~ and over the head ~~[[7]]~~ of the anchor screw in which there is provided a blind hole ~~[[9]]~~ suitable for receiving a screw-driver tool passing through the opening ~~[[27]]~~.

6. (currently amended) An implant according to claim 1, 2 or 4, ~~characterized in that~~ wherein the fixing body ~~[[5]]~~ comprises:

a fixing head ~~[[11]]~~ on which there stands the two side branches ~~[[13]]~~ and in which there is arranged a cavity ~~[[12]]~~ opening out at one end between the side branches ~~[[13]]~~ and opening out at its opposite end;

the positioning ring ~~[[21]]~~ mounted to move with limited displacement inside the cavity ~~[[12]]~~ with its surface for receiving the bracing rod opening between the two side branches;

the head ~~[[7]]~~ of the anchor screw ~~[[2]]~~ mounted at least in part inside the cavity ~~[[12]]~~ so that the positioning ring ~~[[1]]~~ is interposed between said head ~~[[7]]~~ and the body ~~[[5]]~~; and

a closure cup ~~[[29]]~~ fixed on the fixing body ~~[[5]]~~ on its inside face to close the cavity ~~[[12]]~~ and having the anchor screw passing therethrough.

7. (currently amended) An implant according to claim 1 ~~or claim 5, characterized in that,~~ wherein the positioning ring ~~[[21]]~~ and the closure cup ~~[[29]]~~ present partly-

spherical bores [(22, 30)] so as to define the reception housing [(6)] for receiving the head [(7)] of the anchor screw.

8. (currently amended) An implant according to claim 1, ~~characterized in that~~ wherein the nut [(33)] has a shoe [(36)] of width adapted to co-operate with the nut to define on either side of the shoe two gaps [(37)] serving firstly to receive the two pins of a tool for taking hold of the nut, and secondly to pass the side branches [(13)] of the fixing body in order to enable said shoe [(36)] to slide between the side branches [(13)].

9. (currently amended) An implant according to ~~claims 2 and 8, characterized in that~~ claim 2 or 8, wherein the fixing body [(5)] has two slots [(39)] arranged facing each other in the inside walls of the side branches so that once the bracing rod [(3)] has been installed they guide the pins of the tool on the fixing body and they enable the shoe [(36)] to be indexed while out of sight between the side branches [(13)].

10. (currently amended) An implant according to claim 9, ~~characterized in that~~ wherein the nut [(33)] has a shoe [(36)] with two notches [(38)] being formed on the side edges thereof, said notches opening out into the gaps [(37)] and being designed to receive and position pins of the tool.

11. (currently amended) An implant according to claim 8, ~~characterized in that~~ wherein the nut [(33)] has means [(43, 44)] enabling the shoe to be mounted by snap-fastening, which shoe is free to rotate relative to the nut once it has been mounted.

12. (new) An implant according to claim 5, wherein the positioning ring and the closure cup present partly-spherical bores so as to define the reception housing for receiving the head of another screw.